Project Proposal Specs

The goal of the proposal is to describe what you plan to build and how you plan to build it. The specifications below provide the expectations for the project proposal.

It should be no longer than 2-pages worth of text along with any technical documentation needed (i.e., diagrams, tables, or other figures do not count against the 2-page limit). The point is for you to make your description cleard, direct, and concise.

While you are free to organize your proposal in the way that best suits your project, you should be sure to address the following sections:

- Project Description and Overview
- Block Diagram
- Schedule (e.g., Gantt chart or similar)
- FPGA Design Details
- MCU Design Details
- Bill of Materials/Budget

Proficiency

General

- ☐ Bill of materials included with list of all items needed for the project
- ☐ Project lists specifications for design
- ☐ Identifies the riskiest element of the project

Technical

- ☐ Describes microcontroller use
- ☐ Project uses FPGA
- ☐ Project uses new hardware

Documentation

- ☐ Block diagram of system provided showing all elements of the design and their connections.

Excellence

General

- ☐ Completely clear what the project must do to meet specs.
- ☐ Rough timeline included which lists the tasks which need to be completed, the order in which they will be pursued, and the time they are expected to take.
- ☐ Short explanation of how the project tasks will be divided among the team members.
- ☐ Writing is well organized
- ☐ No grammar or spelling issues.

Technical

- ☐ Project uses functionality of microcontroller not previously covered in labs
- ☐ Project uses functionality of FPGA not previously covered in labs
- ☐ Project uses new non-trivial new hardware (e.g., digital chip with non-trivial interface)

Documentation

- ☐ Bill of materials includes part numbers, quantities, and prices for all components. Prices for components available in the stock room should be indicated as "stockroom".
- ☐ Block diagram of system clearly deliniates all protocols and interfaces.
- ☐ Block diagram is computer drawn and neatly laid out.